

The Office Action stated that the claims were unclear in their recitation of "angiostatin binding portion." Although this term is not believed to be unclear, the claims have been amended to specify that the binding is to the alpha and/or beta subunits (support for which is found at least on page 9, lines 19-23).

The Office Action further stated that the claims were unclear because it cannot be determined whether a test compound is present in step (i). Applicants believe the claims as amended are clear. The test compound and angiostatin are contacted with the ATP synthase or alpha and/or beta subunits thereof under such conditions that angiostatin could bind the ATP synthase or alpha and/or beta subunits thereof in the absence of the test compound. In other words, the conditions are such that, if the test compound were not present, angiostatin could bind the ATP synthase or alpha and/or beta subunits thereof and inhibit angiogenesis or proton pumping. These conditions provide a baseline for determining the effect of the compound when the compound is added.

The ability of the test compound to promote or inhibit angiogenesis (claim 10-13) or inhibit or enhance proton pumping (claim 14) is determined by comparing the baseline concentration of angiostatin and the concentration of angiostatin needed to get the same result after the test compound is added. In those claims related to promoting or inhibiting angiogenesis, if more angiostatin is needed to achieve the same result, the compound inhibited the ability of angiostatin to inhibit angiogenesis (i.e., the compound promoted angiogenesis). If less angiostatin is needed, the compound promoted the ability of angiostatin to inhibit angiogenesis (i.e., the compound inhibited angiogenesis). The same applies to claim 14, related to inhibiting or enhancing proton pumping.

Claims 4-7 were rejected on the basis that it is purportedly unclear what association with a lipid membrane is. Those of skill in the art can readily determine whether the ATP synthase is associated with the lipid membrane of a cell or not. Applicants will provide appropriate literature support for this proposition if this rejection is maintained.

Claims 10 and 13-14 were purportedly unclear in their recitation of "modulate a bioactivity." Although this is not believed to be unclear given the level of detail in the specification, claims 10-13 have been amended to recite "promote or inhibit angiogenesis" and claim 14 has been amended to recite "inhibit or enhance proton pumping" as the bioactivity to be modulated and the type of modulation.

Rejections under 35 U.S.C. § 112, First Paragraph

Claims 1-7, 10 and 13-14 have been rejected under 35 U.S.C. § 112, first paragraph as non-enabled. These rejections are respectfully traversed as applied to the amended claims.


The claims have been amended to specify that the binding is to ATP synthase or alpha and/or beta subunits thereof, rather than to "angiostatin binding portion thereof", which was objected to by the Examiner. Applicants currently have data showing that compounds that bind to ATP synthase also bind to the isolated alpha and/or beta receptors thereof and submit that the application is enabling for the pending claims.

Conclusion

It is believed that the claims as amended are allowable. If the Examiner has any questions or further comments, she is invited to please contact the undersigned.

Respectfully submitted,

NIXON & VANDERHYE, P.C.

By 
for Mary J. Wilson Reg. No. 32,955 *Reg No. 32,331*

MJW:tat

1100 North Glebe Road
8th Floor
Arlington, Virginia 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100